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ABSTRACT

This instructor's packet accompanies the learning activity package (LAP) on using the metric system. Contents included in the packet are a time sheet, suggested uses for the LAP, an instruction sheet, final LAP reviews, a final LAP review answer key, an additional resources list, a word game (handout), and student completion cards to issue to students as an indicator of successful LAP completion. (YLB)

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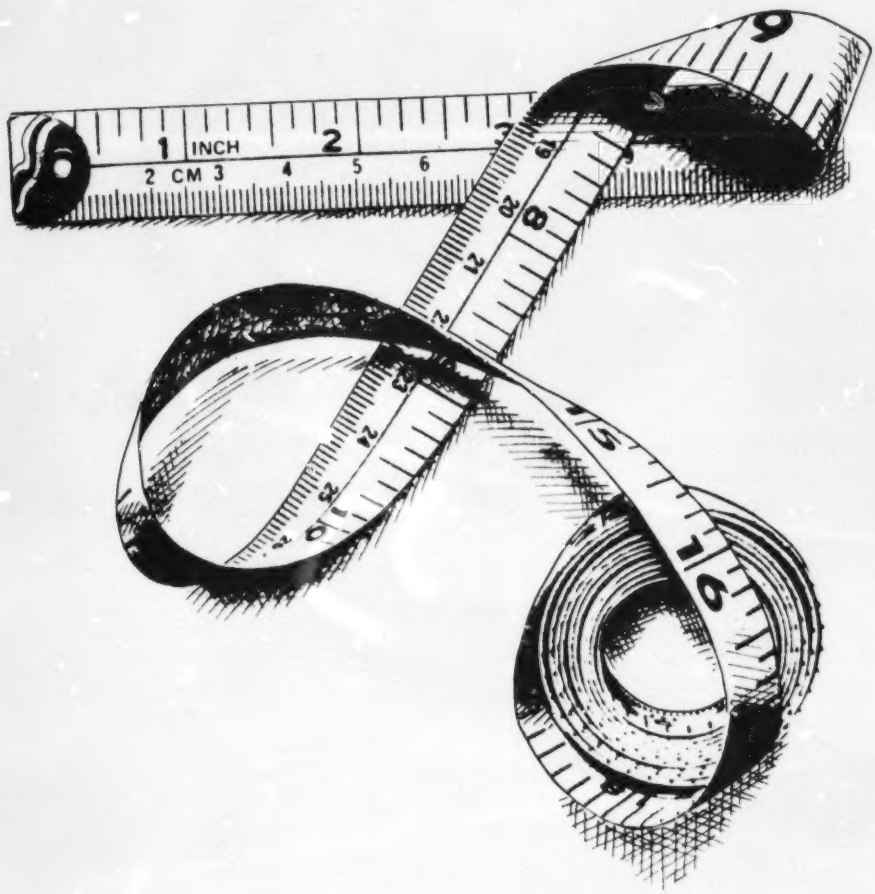
LAP *Learning Activity Package*

Instructor's Packet

Using The Metric System In Health Careers



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Using The Metric System In Health Careers

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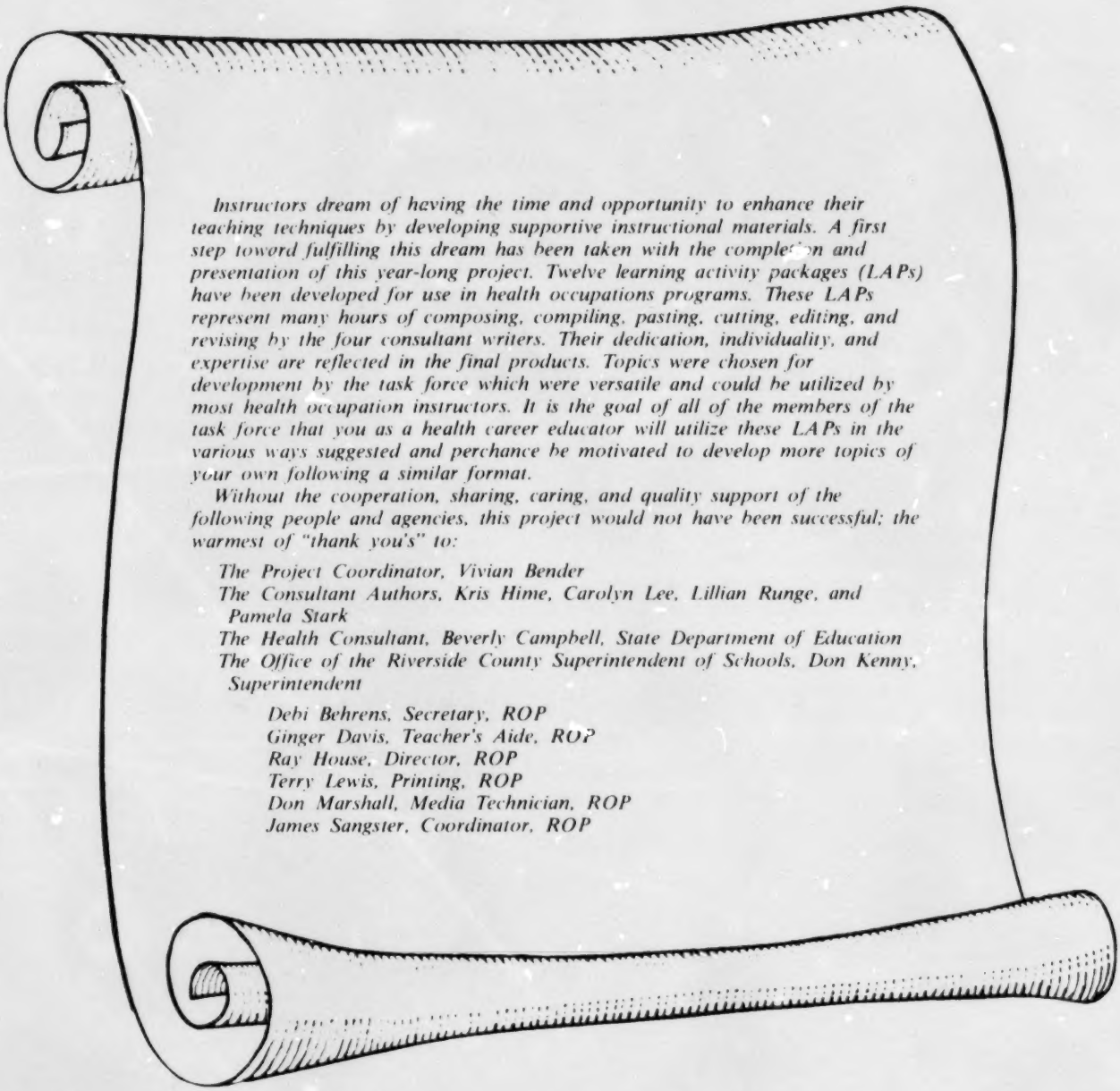

Instructors dream of having the time and opportunity to enhance their teaching techniques by developing supportive instructional materials. A first step toward fulfilling this dream has been taken with the completion and presentation of this year-long project. Twelve learning activity packages (LAPs) have been developed for use in health occupations programs. These LAPs represent many hours of composing, compiling, pasting, cutting, editing, and revising by the four consultant writers. Their dedication, individuality, and expertise are reflected in the final products. Topics were chosen for development by the task force which were versatile and could be utilized by most health occupation instructors. It is the goal of all of the members of the task force that you as a health career educator will utilize these LAPs in the various ways suggested and perchance be motivated to develop more topics of your own following a similar format.

Without the cooperation, sharing, caring, and quality support of the following people and agencies, this project would not have been successful; the warmest of "thank you's" to:

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INSTRUCTOR'S PACKET

A LAP IS AN INDIVIDUALIZED LEARNING ACTIVITY PACKAGE TO ASSIST THE STUDENT TO ACQUIRE KNOWLEDGE FOR A SPECIFIC TOPIC.

INCLUDED IN THIS PACKET ARE THE FOLLOWING:

1. Suggested uses for LAP
2. Instruction sheet
3. LAP review
4. LAP review key
5. Suggested activity list
6. Additional resources
7. Student completion cards
8. Student work sheet

TIME

TIME REQUIRED WILL VARY WITH EACH STUDENT, BUT THE INSTRUCTOR SHOULD ALLOW AT LEAST _____ MINUTES FOR THE STUDENT TO COMPLETE THIS LAP.

SUGGESTED USES FOR THE MATERIALS INCLUDED IN THIS LAP ARE LISTED BELOW:

REVIEW

EVALUATION

SPIRIT MASTERS

XEROX

HANDOUTS

REMEDIAL WORK

TOPIC CHALLENGE FOR STUDENT

OVERHEADS

DITTOS

POSTERS

MAKE-UP WORK

CLASSROOM ACTIVITIES

INSTRUCTION SHEET

1. GIVE EACH STUDENT A LAP.

2. HAVE EACH STUDENT READ THE LAP AND COMPLETE THE REVIEW SECTIONS.

   THE STUDENT MUST GET EVERY QUESTION IN THE REVIEW SECTION CORRECT BEFORE CONTINUING ON TO THE NEXT TOPIC. IF ALL OF THE ANSWERS ARE NOT CORRECT, REPEAT THE SECTION OR TOPIC.

3. WHEN THE LAP IS COMPLETED, THE LAP AND WORK SHEETS SHOULD BE TURNED IN TO THE INSTRUCTOR, AND THE STUDENT SHOULD BE GIVEN THE FINAL LAP REVIEW.

4. AFTER ALL* OF THE FINAL LAP REVIEW QUESTIONS ARE ANSWERED CORRECTLY, THE STUDENT WILL RECEIVE A COMPLETION CARD. COMPLETION CARDS ARE INCLUDED IN THIS PACKET.

5. THE TIME FOR COMPLETING THE LAP WILL VARY WITH EACH STUDENT.

*IF THE STUDENT DOES NOT ANSWER ALL OF THE QUESTIONS CORRECTLY, RETURN THE LAP TO THE STUDENT FOR FURTHER REVIEW.

METRIC SYSTEM

FINAL REVIEW.

FILL IN THE BLANKS

1. THE _____ IS THE BASIC UNIT OF THE METRIC SYSTEM.

2. THE SERVICE THAT ALREADY USES THE METRIC SYSTEM IS THE _____ SERVICE.

3. WHEN WAS THE METRIC SYSTEM MADE LEGAL IN THE UNITED STATES? _____

4. THE SYMBOL FOR LITER IS _____.

5. WEIGHT IS MEASURED IN (A) _____ WHICH REPLACES (B) _____ _____ AND (C) _____.

6. THE NORMAL BODY TEMPERATURE IS _____ DEGREES CELSIUS.

7. THERE ARE _____ mL IN ONE OUNCE.

8. CONVERT THE FOLLOWING INTO MILLILITERS:
   A. 6 OZ. TEA _____
   B. 10 OZ. MILK _____
   C. 2 OZ. JELLO _____
   D. 8 OZ. SOUP _____

9. A VERY SMALL QUANTITY OF MASS IS CALLED A _____.

10. A MILLIMETER IS A VERY _____ DIMENSION.

CHOOSE THE RIGHT ANSWER.

11. WHICH OF THE FOLLOWING IS NOT AN ADVANTAGE OF THE METRIC SYSTEM?
    A. FEWER MORE SENSIBLE SIZES
    B. UNITS ARE IN MULTIPLES OF 10
    C. EASIER FOR IMPORT/EXPORT
    D. HARDER TO CALCULATE

12. THE METER REPLACES:
    A. INCH, FOOT, YARD, MILE
    B. OUNCE, POUND
    C. CUP, PINT, QUART
    D. FAHRENHEIT, CENTIGRADE

13. THE LITER MEASURES:
    A. SMALL AMOUNTS
    B. LARGER AMOUNTS
    C. AUTOMOBILES
    D. ANYTHING YOU WANT

14. WHICH OF THE FOLLOWING ITEMS IS THE APPROXIMATE SIZE OF A METRIC TON?
    A. PENCIL
    B. VOLKSWAGON BEETLE
    C. TYPEWRITER
    D. CHAIR

15. A KILOMETER MEASURES:
    A. SHORT DISTANCES
    B. 1 FOOT
    C. 40 INCHES
    D. LONGER DISTANCES

16. WHICH OF THE FOLLOWING IS THE BOILING POINT OF WATER?

A. 212 CELSIUS

B. 0 CELSIUS

C. 100 CELSIUS

D. 40 CELSIUS

MATCH THE FOLLOWING.

17. A. _____KILO-	1. 100
B. _____HECTO-	2. 1000
C. _____DECI-	3. 1/100
D. _____CENTI-	4. 1/1000
E. _____MILLI	5. 1/10

TRUE OR FALSE

18. A. _____YOU MAY USE FRACTIONS IN THE METRIC SYSTEM.

B. _____PLURALS ARE ACCEPTABLE WHEN USING SYMBOLS.

C. _____NO COMMAS ARE ALLOWED.

D. _____YOU MUST LEAVE A SPACE BETWEEN THE NUMBER AND THE SYMBOL.

E. _____A ZERO PRECEDES THE DECIMAL POINT IF THE NUMBER IS LESS THAN ONE.

CONVERT THE FOLLOWING TO CELSIUS

19. A. 102.2°F._____

B. 99.6°F. _____

C. 97.2°F. _____

METRIC SYSTEM

Completion Test Key

1. METER
2. HEALTH
3. 1866
4. L
5. A. GRAMS
   B. OUNCES
   C. POUNDS
6. 37 DEGREES
7. 30
8. A. 180 mL
   B. 300 mL
   C. 60 mL
   D. 240 mL
9. MILLIGRAM
10. SMALL
11. D
12. A
13. B
14. B
15. D
16. C
17. A. 2
    B. 1
    C. 5
    D. 3
    E. 4
18. A. F
    B. F
    C. T
    D. T
    E. T
19. A. 39 DEGREES
    B. 37.6 DEGREES
    C. 36.2 DEGREES

METRIC SYSTEM

NAME _____

CLASS _____

DATE _____

FINAL LAP REVIEW

1. _____
2. _____
3. _____
4. _____
5. A. _____
   B. _____
   C. _____
6. _____
7. _____
8. A. _____
   B. _____
   C. _____
   D. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. A. _____
    B. _____
    C. _____
    D. _____
    E. _____
18. A. _____
    B. _____
    C. _____
    D. _____
    E. _____
19. A. _____
    B. _____
    C. _____

Additional Resources

Webster's New Collegiate Dictionary, 7th Edition

The Metric System (filmstrip) by Trainex, Inc.

Completion Cards

STUDENT COMPLETION CARDS ARE PROVIDED FOR THE INSTRUCTOR TO ISSUE TO THE STUDENTS WHO HAVE SUCCESSFULLY COMPLETED THE LAP.

METRIC SYSTEM

WORD GAME

N	O	M	E	R	T	E	M	I	T	N	E	C	N	X
A	T	C	D	S	E	C	O	N	D	A	D	E	H	J
I	M	E	J	U	M	M	E	T	E	A	M	E	X	A
D	E	N	O	I	S	E	X	R	R	U	C	L	C	M
A	F	T	U	S	K	T	T	A	L	T	D	A	C	I
R	M	I	L	L	I	I	F	R	O	D	E	C	A	L
E	E	I	E	E	L	I	L	R	E	O	G	S	N	I
T	G	N	L	C	O	J	T	O	N	G	R	A	D	G
S	A	I	R	L	P	I	C	O	G	T	E	P	E	R
H	E	N	R	Y	I	L	I	K	O	R	E	O	L	A
G	M	G	R	A	M	L	E	O	T	T	A	H	A	M
I	I	E	R	T	I	L	I	L	L	I	M	M	A	P
W	E	B	E	R	V	W	A	T	T	V	O	L	T	E
A	R	A	D	I	A	N	T	E	R	A	L	U	X	R
O	N	A	N	O	T	W	E	N	M	E	E	L	Z	E

OVER 35 — HOW MANY WORDS RELATED TO THE METRIC SYSTEM CAN YOU FIND? WORDS MAY BE SPELLED UP OR DOWN, BACKWARDS OR FORWARDS, OR DIAGONALLY, AS SHOWN IN THE EXAMPLE. (THE "RE" SPELLINGS ADOPTED BY THE INTERNATIONAL SYSTEM OF UNITS (SI) ARE USED IN THIS WORD GAME FOR METRE, LITRE, AND SO FORTH.)

This is to certify that

_____

has successfully completed the Metrics L.A.P.

Date: _____

Instructor: _____

This is to certify that

_____

has successfully completed the Metrics L.A.P.

Date: _____

Instructor: _____

This is to certify that

_____

has successfully completed the Metrics L.A.P.

Date: _____

Instructor: _____

This is to certify that

_____

has successfully completed the Metrics L.A.P.

Date: _____

instructor: _____

This is to certify that

_____

has successfully completed the Metrics L.A.P.

Date: _____

Instructor: _____

This is to certify that

_____

has successfully completed the Metrics L.A.P.

Date: _____

Instructor: _____

This is to certify that

_____

has successfully completed the Metrics L.A.P.

Date: _____

Instructor: _____

This is to certify that

_____

has successfully completed the Metrics L.A.P.

Date: _____

Instructor: _____

This is to certify that

_____

has successfully completed the Metrics L.A.P.

Date: _____

Instructor: _____

YOUR VERY OWN WORK SHEET

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This learning activity package is one of a series of 12 titles relating to health careers that are available from the California State Department of Education. A student packet and an instructor's packet are published in each of the following subjects:

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